Fig. 1

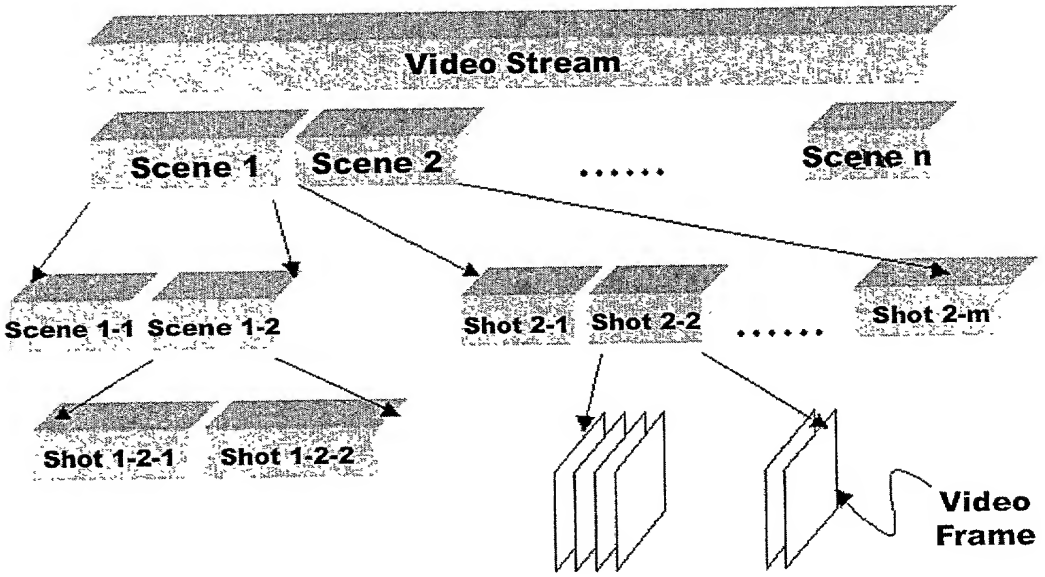

Video Stream
Scene 1
Scene 2
.....
Scene n
Scene 1-1
Scene 1-2
Shot 2-1
Shot 2-2
.....
Shot 2-m
Shot 1-2-1
Shot 1-2-2
Video Frame

Fig. 2

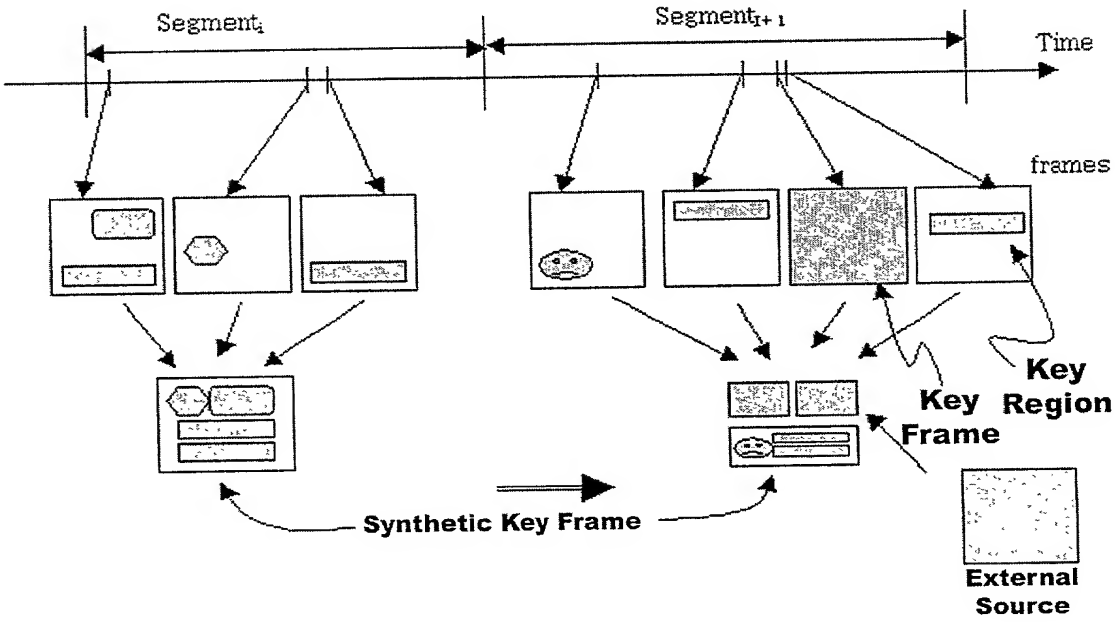

Segment$_i$
Segment$_{i+1}$
Time
frames
Key Region
Key Frame
Synthetic Key Frame
External Source

Fig. 3 (Related Art)

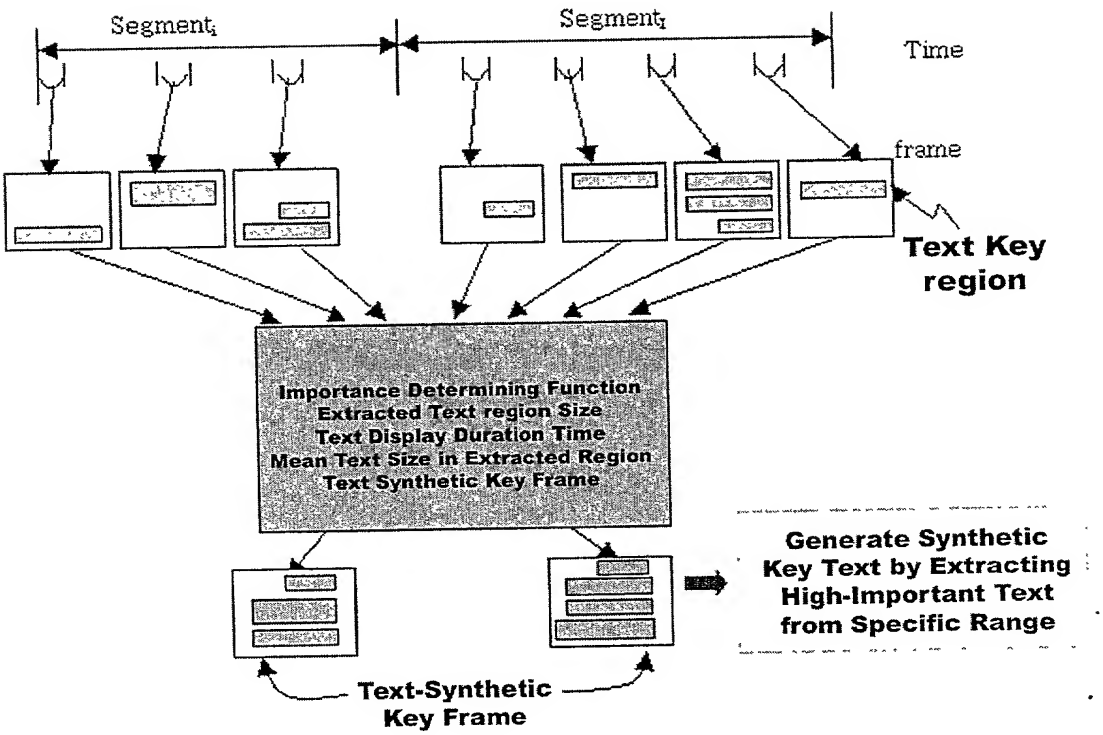


Fig. 4

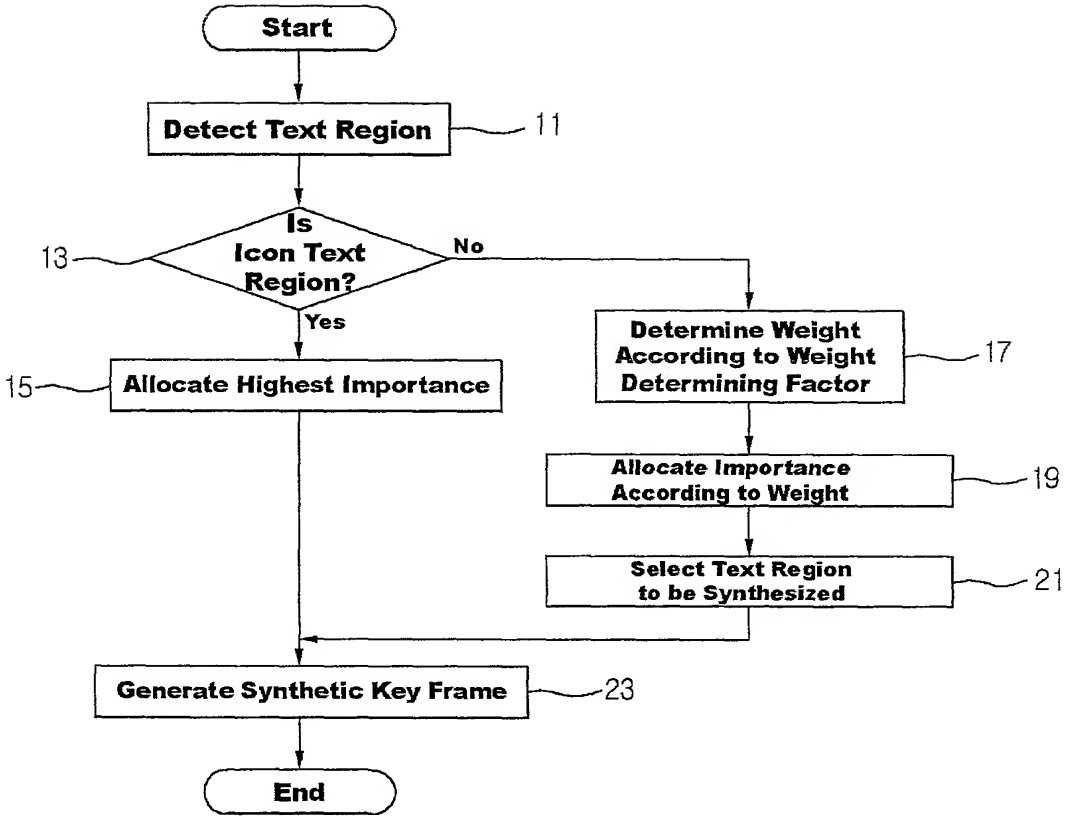

Start
Detect Text Region
11
Is Icon Text Region?
13
No
Yes
Determine Weight According to Weight Determining Factor
17
15
Allocate Highest Importance
Allocate Importance According to Weight
19
Select Text Region to be Synthesized
21
Generate Synthetic Key Frame
23
End

Fig. 5

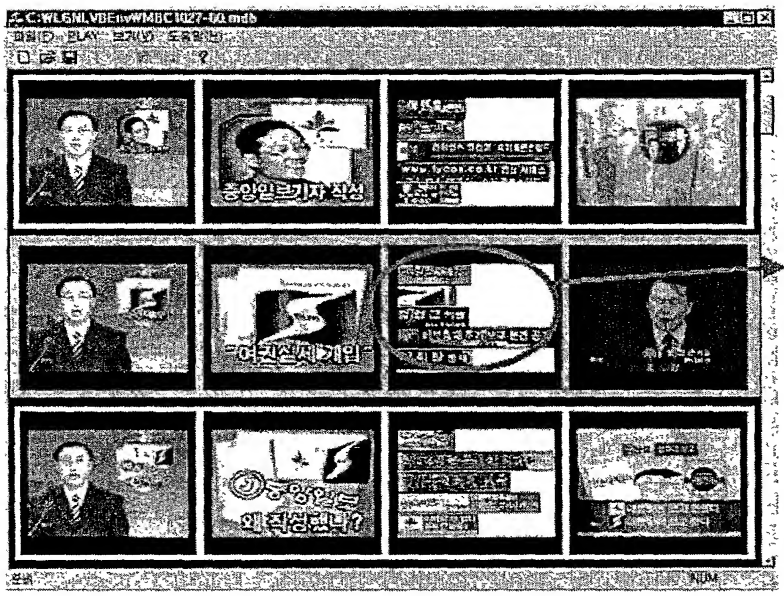


Fig. 6

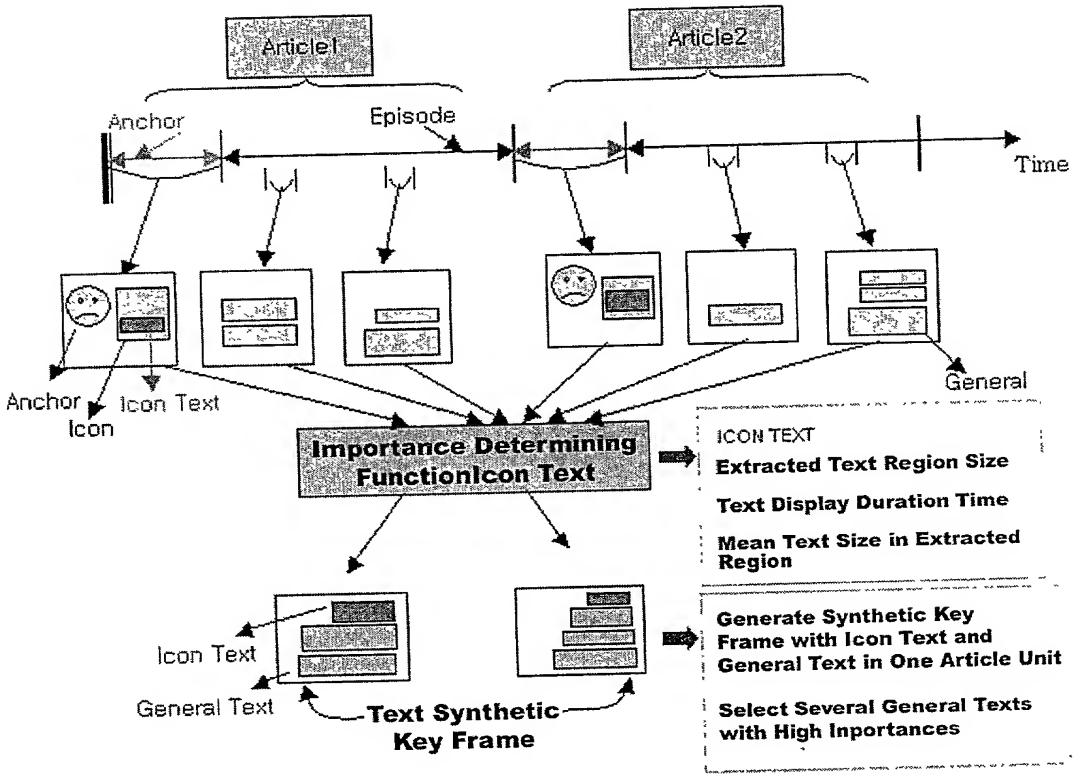
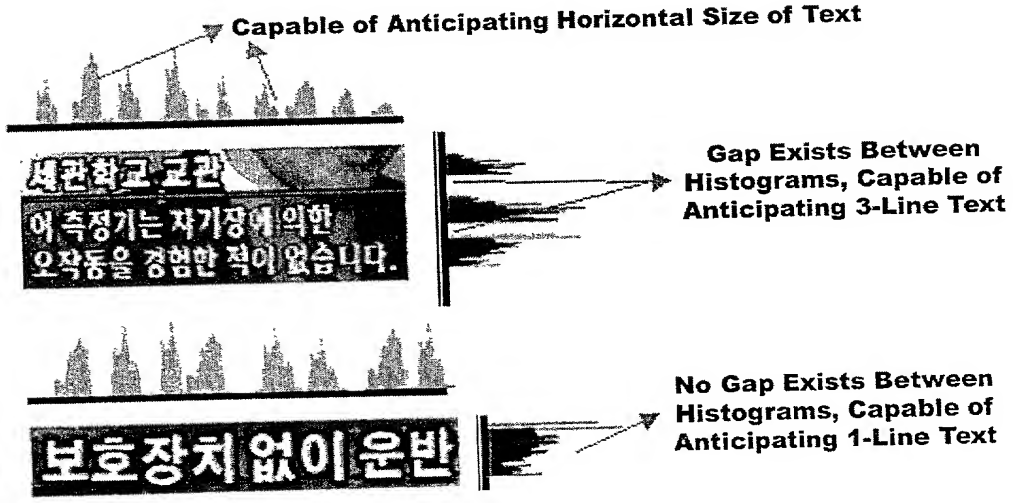

Article1
Article2
Anchor
Episode
Time
Anchor Icon
Icon Text
General
Importance Determining FunctionIcon Text
ICON TEXT
Extracted Text Region Size
Text Display Duration Time
Mean Text Size in Extracted Region
Icon Text
General Text
Text Synthetic Key Frame
Generate Synthetic Key Frame with Icon Text and General Text in One Article Unit
Select Several General Texts with High Inportances

Fig. 7


Capable of Anticipating Horizontal Size of Text
Gap Exists Between Histograms, Capable of Anticipating 3-Line Text
No Gap Exists Between Histograms, Capable of Anticipating 1-Line Text